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99-31

April 14, 1999

Mr. Dale Hatfield
Office of Engineering and Technology
Federal Communications Commission
2000 M Street, N.W.
Room 480
Washington, D.C., 20554

Re: **Final Service Disruption Report**

Dear Mr. Hatfield:

Pursuant to the requirements established in the Report and Order in CC Docket No. 91-273 (Amendment of Part 63 of the Commission's Rules to Provide for Notification by Common Carriers of Service Disruptions), **Southwestern Bell Telephone Company** submits the attached **Final** Service Disruption Report associated with a service disruption in **Dallas, Texas on March 15, 1999.**

An Initial Service Disruption Report was faxed to the FCC's Monitoring Watch Officer on that date.

Please stamp and return the provided copy to confirm your receipt. Please contact me if you have questions regarding this service disruption.

Sincerely,

Barbara Reaves

Enclosures

CC: Bob Kimball

Southwestern Bell Telephone

Retention Period: 6 Years

FCC SERVICE DISRUPTION REPORT

( ) Initial Report ( ) Update (X) Final

OCCURRED: DATE: 03/15/99 TIME: 22:30 CST (X) 50,000 or More Customers
( ) 30,000 - 49,999 Customers

ENDED: DATE: 03/16/99 TIME: 01:25 CST ( ) Special Offices/Facilities

GEOGRAPHICAL AREA AFFECTED: Dallas, Texas

ESTIMATED CUSTOMERS AFFECTED: Greater than 50,000

TYPE(S) OF SERVICE AFFECTED: IntraLATA, InterLATA, Operator Service, Interexchange and Switched Services

ESTIMATED BLOCKED CALLS: 194,598

CAUSE OF THE DISRUPTION: At 22:30 CST, on Monday, March 15, 1999, a Tellabs TITAN 5500 Digital Cross-connect System (DCS) in the Dallas Taylor Central Office ceased operating. A Tellabs Customer Service Engineer (CSE) was removing micro-coax cables on the back of Network 'A' and at approximately the same time, Network 'B' incurred a fault which caused the DCS to go into a dual inhibit mode. The CSE was trouble shooting a problem when the outage occurred.

Tellabs performed extensive tests and was able to duplicate the failure in their laboratory. The random removal of micro-coax cables on the back of Network 'A' and a subsequent fault on a Local Area Network (LAN) micro-coax cable to Network 'B', which exceeded engineering limits, was determined to be the cause of the outage.

Two Southwestern Bell Telephone remote central offices and two Independent Company Central Offices were isolated from the toll network during the outage. Approximately 400 DS-3's are routed through the DCS. There was no media coverage of the event. E911 service was not affected.

Root Cause is Procedural - System Vendor due to Insufficient Control.

NAME AND TYPE OF EQUIPMENT INVOLVED: Tellabs 5500 TITAN Digital Cross-connect System

SPECIFIC PART OF NETWORK INVOLVED: Toll Network

BEST PRACTICES: Best Practices covering this outage are contained in Section D of the Network Reliability: A Report to the Nation - Compendium of Technical Papers, dated June 1993. Southwestern Bell observes those practices that are consistent with providing outstanding customer service.

METHODS USED TO RESTORE SERVICE: Replaced micro-coax cables on Network 'A' and temporarily re-routed micro-coax LAN cable to insure it was within engineering limits.

STEPS TAKEN TO PREVENT RECURRENCE:

1. Tellabs will develop and publish a micro-coax cable removal procedure to avoid the dual inhibit mode that occurred in this outage and issue a Field Bulletin to Tellabs Customer Support Engineers notifying them of the change.

2. A joint investigation will be conducted to determine who engineered other TITAN 5000 DCS in Southwestern Bell Telephone. If Tellabs installed the DCS, then a review of Tellabs records will be completed to insure LAN cables are within specifications. If another vendor is involved, an effort will be made to obtain engineering records, if available, and Southwestern Bell will take the necessary steps to make LAN cable lengths compliant with engineering limits.

3. A permanent fix for the TITAN 5500 DCS LAN runs in the Taylor Central Office will be scheduled.

4. Tellabs has been requested to determine the feasibility of manufacturing the micro-coax cables with insulated boots.

PREPARED BY: Jim Lankford **TELEPHONE:** 210-886-4589
DATE SUBMITTED: 04/14/99 **TIME:** 11:30 CDT